## **AMENDMENTS TO THE CLAIMS**

The below listing of claims will replace all prior versions, and listings, of claims in the application.

1 (Original). A compound of Formula (I):

wherein:

Q is  $-CO_{-}$ ,  $-SO_{2^{-}}$ ,  $-OCO_{-}$ ,  $-NR^{4}CO_{-}$ ,  $-NR^{4}SO_{2^{-}}$ , or  $-CHR_{-}$  where R is haloalkyl and R<sup>4</sup> is hydrogen, alkyl, hydroxyalkyl, alkoxyalkyl, or aralkyl;

E is:

$$(i) \qquad -C(R^5)(R^6)X^1 \quad \text{where } X^1 \text{ is } -C(R^7)(R^8)R^{10}, \ -CH=CHS(O)_2R^{10}, \\ -C(R^7)(R^8)C(R^7)(R^8)OR^{10}, \ -C(R^7)(R^8)CH_2OR^{10}, \ -C(R^7)(R^8)CH_2N(R^{11})SO_2R^{10}, \\ -C(R^7)(R^8)C(O)N(R^{11})(CH_2)_2OR^{11}, \ -C(R^7)(R^8)C(O)NR^{10}R^{11} \quad \text{or} \\ -C(R^7)(R^8)C(O)N(R^{11})(CH_2)_2NR^{10}R^{11}; \\ \qquad \qquad (ii) \qquad -C(R^{5a})(R^{5a})CN; \\ \end{aligned}$$

where:

R<sup>5</sup> and R<sup>5a</sup> are independently hydrogen or alkyl:

R<sup>6</sup> and R<sup>6a</sup> are independently selected from the group consisting of hydrogen, alkyl, haloalkyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, heterocycloalkyl, heterocycloalkyl, heterocycloalkylalkyl, -alkylene-X²-R¹² (where X² is -O-, -NR¹³-, -S(O)<sub>n1</sub>-, -CONR¹³-, -NR¹³CO-, -NR¹³C(O)O-, -NR¹³CONR¹³-, -OCONR¹³-, -NR¹³SO₂-, -SO₂NR¹³-, -NR¹³SO₂NR¹³-, -CO-, or -OC(O)- where n1 is 0-2 and each R¹³ is hydrogen or alkyl) and R¹² hydrogen, alkyl, haloalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heterocycloalkylalkyl, aryl, aralkyl, heteroaryl, or heteroaralkyl wherein the aromatic or alicyclic ring in R<sup>6</sup> and R<sup>6a</sup> is optionally substituted with one, two, or three R³ independently selected from alkyl, haloalkyl, alkoxy, hydroxy, haloalkoxy, halo, carboxy, alkoxycarbonyl, amino, monsubstituted amino, disubstituted amino, nitro, aryloxy, benzyloxy, acyl, alkylsulfonyl, or arylsulfonyl where the aromatic or alicyclic ring in R³ is optionally substituted with one or two substituents independently selected from alkyl, halo, alkoxy, haloalkyl, haloalkoxy, hydroxy, amino, alkylamino, dialkylamino, carboxy, or alkoxycarbonyl; or

R<sup>5</sup> and R<sup>6</sup> and R<sup>5a</sup> and R<sup>6a</sup> taken together with the carbon atom to which both R<sup>5</sup> and R<sup>6</sup> and R<sup>5a</sup> and R<sup>6a</sup> are attached form (i) cycloalkylene optionally substituted with one or two R<sup>b</sup> independently selected from alkyl, halo, alkylamino, dialkylamino, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, alkoxycarbonyl, or aryloxycarbonyl or (ii) heterocycloalkylene optionally substituted with one to four alkyl or one or two Rc independently selected from alkyl, haloalkyl, hydroxy, hydroxyalkyl, alkoxyalkyl, alkoxyalkyl, alkoxyalkyl, aryloxyalkyl, heteroaryloxyalkyl, aminoalkyl, acyl, aryl, aralkyl, heteroaryl, heteroaralkyl, heterocycloalkyl, heterocycloalkylalkyl, cycloalkyl, cycloalkylalkyl, -S(O)<sub>n2</sub>R<sup>14</sup>, -alkylene-S(O)<sub>n2</sub>-R<sup>15</sup>, -COOR<sup>16</sup>, -alkylene-COOR<sup>17</sup>, -CONR<sup>18</sup>R<sup>19</sup>, or -alkylene-CONR<sup>20</sup>R<sup>21</sup> (where n2 is 0-2 and R<sup>14</sup>-R<sup>17</sup>, R<sup>18</sup> and R<sup>20</sup> are independently hydrogen, alkyl, haloalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, cycloalkyl, cycloalkylalkyl, or heterocycloalkyl and R<sup>19</sup> and R<sup>21</sup> are independently hydrogen or alkyl) wherein the aromatic or alicyclic ring in the groups attached to cycloalkylene or heterocycloalkylene is optionally substituted with one, two, or three substituents independently selected from alkyl, haloalkyl, cycloalkyl, cycloalkyl, benzyl, alkoxy, hydroxy, haloalkoxy, halo, carboxy, alkoxycarbonyl, amino, monsubstituted amino, disubstituted amino, or acyl;

R<sup>7</sup> is hydrogen or alkyl;

R<sup>8</sup> is hydroxy; or

R<sup>7</sup> and R<sup>8</sup> together form oxo;

R<sup>10</sup> is alkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, or heterocycloalkylalkyl wherein the aromatic or alicyclic ring in R<sup>10</sup> is optionally substituted with one, two, or three R<sup>d</sup> independently selected from alkyl, haloalkyl, alkoxy, alkoxyalkyl, cycloalkyl, hydroxy, haloalkoxy, halo, carboxy, alkoxycarbonyl, aminosulfonyl, alkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, aryl, aralkyl, heteroaryl, amino, monsubstituted amino, disubstituted amino, carbamoyl, or acyl and wherein the aromatic or alicyclic ring in R<sup>d</sup> is optionally substituted with one, two, or three substitutents independently selected from alkyl, haloalkyl, alkoxy, haloalkoxy, halo, hydroxy, carboxy, alkoxycarbonyl, amino, alkylamino, or dialkylamino; and

R<sup>11</sup> is hydrogen or alkyl; or

(iii) a group of formula (a):

$$\mathbb{R}^{5}$$
 $\mathbb{R}^{5}$ 
 $\mathbb{R}^{5}$ 
 $\mathbb{R}^{5}$ 

where:

n is 0, 1, or 2;

X<sup>4</sup> is selected from –NR<sup>22</sup>-, -S-, or –O- where R<sup>22</sup> is hydrogen, alkyl, or alkoxy; and X<sup>5</sup> is –O-, -S-, -SO<sub>2</sub>-, or –NR<sup>23</sup>- where R<sup>23</sup> is selected from hydrogen, alkyl, haloalkyl, hydroxyalkyl, alkoxyalkyl, aryloxyalkyl, heteroaryloxyalkyl, aminoalkyl, acyl, aryl, aralkyl, heteroaryl, heteroaralkyl, cycloalkyl, cycloalkylalkyl, -S(O)<sub>2</sub>R<sup>24</sup>, -alkylene-S(O)<sub>n3</sub>-R<sup>25</sup>, -COOR<sup>26</sup>, -alkylene-COOR<sup>27</sup>, -CONR<sup>28</sup>R<sup>29</sup>, or -alkylene-CONR<sup>30</sup>R<sup>31</sup> (where n3 is 0-2 and R<sup>24</sup>-R<sup>27</sup>, R<sup>28</sup> and R<sup>30</sup> are independently hydrogen, alkyl, haloalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, or heterocycloalkylalkyl and R<sup>29</sup> and R<sup>31</sup> are independently hydrogen or alkyl) where the aromatic or alicyclic ring in R<sup>23</sup> is optionally substituted with one, two, or three substituents independently selected from alkyl, haloalkyl, alkoxy, haloalkoxy, halo, hydroxy, amino, alkylamino, dialkylamino, carboxy, or alkoxycarbonyl and one substitutent selected from aryl, aralkyl, heteroaryl, or heteroaralkyl; and

R<sup>5</sup> is as defined above;

R<sup>1</sup> is hydrogen or alkyl;

R<sup>1a</sup> is 1,1-dialkylsilinan-4-ylalkylene or –(alkylene)-SiR<sup>32</sup>R<sup>33</sup>R<sup>34</sup> where R<sup>32</sup> is alkyl, R<sup>33</sup> is alkyl, and R<sup>34</sup> is alkyl, alkenyl, cycloalkylalkyl, aryl, aralkyl, heteroaralkyl, or heterocycloalkylalkyl or R<sup>33</sup> and R<sup>34</sup> together with Si form a heterocycloalkylene ring containing the Si atom and 3 to 7 carbon ring atoms wherein one or two carbon ring atoms are optionally independently replaced with –NH-, -O-, –S-, -SO-, –SO<sub>2</sub>-, -CO-, -CONH-, or –SO<sub>2</sub>NH- and wherein the aralkyl, heteroaralkyl, heterocycloalkyl, or heterocycloalkylene ring in R<sup>1a</sup> is optionally substituted on the ring with one, two, or three R<sup>e</sup> independently selected from alkyl, haloalkyl, alkoxy, hydroxy, haloalkoxy, halo, carboxy, alkoxycarbonyl, amino, monsubstituted amino, disubstituted amino, nitro, aryloxy, benzyloxy, acyl, alkylsulfonyl, or arylsulfonyl and further wherein the aromatic or alicyclic ring in R<sup>e</sup> is optionally substituted with one or two substituents independently selected from alkyl, halo, alkoxy, haloalkyl, haloalkoxy, hydroxy, amino, alkylamino, dialkylamino, carboxy, or alkoxycarbonyl;

R<sup>2</sup> is hydrogen or alkyl;

 $R^3$  is alkyl, haloalkyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, heterocycloalkylalkyl, or –alkylene- $X^6$ - $R^{35}$  [wherein  $X^6$  is –NR $^{36}$ -, -O-, -S(O)<sub>n4</sub>-, -CO-, -COO-, -OCO-, -NR $^{36}$ CO-, -CONR $^{36}$ -, -NR $^{36}$ SO<sub>2</sub>-, -SO<sub>2</sub>NR $^{36}$ -, -NR $^{36}$ COO-, -OCONR $^{36}$ -, -NR $^{36}$ CONR $^{37}$ -, or –NR $^{36}$ SO<sub>2</sub>NR $^{37}$ - (where each  $R^{36}$  and  $R^{37}$  is independently hydrogen, alkyl, or acyl and n4 is 0-2) and  $R^{35}$  is hydrogen, alkyl, haloalkyl, cycloalkyl, cycloalkyl, heterocycloalkyl, heterocycloalkylalkyl, aryl, aralkyl, heteroaryl, or heteroaralkyl] wherein the alkylene chain in  $R^3$  is optionally substituted with one to four halo atoms and the

aromatic and alicyclic rings in R³ are optionally substituted by one, two, or three Rf independently selected from alkyl, aminoalkyl, halo, hydroxy, alkoxy, haloalkyl, haloalkoxy, oxo, cyano, nitro, acyl, acyloxy, aryl, aralkyl, heteroaryl, heteroaralkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heterocycloalkylalkyl, aryloxy, benzyloxy, carboxy, alkoxycarbonyl, aryloxycarbonyl, carbamoyl, alkylthio, alkylsulfinyl, alkylsulfonyl, arylsulfonyl, arylsulfonyl, arylsulfinyl, alkoxycarbonylamino, aryloxycarbonylamino, alkylcarbamoyloxy, arylcarbamoyloxy, alkylsulfonylamino, arylsulfonylamino, aminosulfonyl, alkylaminosulfonyl, dialkylaminosulfonyl, arylaminosulfonyl, aralkylaminosulfonyl, aminocarbonyl, arylaminocarbonyl, aralkylaminosulfonyl, amino, monosubsituted or disubstituted amino, and further wherein the aromatic and alicyclic rings in Rf are optionally substituted with one, two, or three Rg wherein Rg is independently selected from alkyl, halo, haloalkyl, haloalkoxy, hydroxy, nitro, cyano, hydroxyalkyl, alkoxy, alkoxyalkyl, aminoalkyl, alkylthio, alkylsulfonyl, amino, monosubstituted amino, dialkylamino, aryl, heteroaryl, cycloalkyl, carboxy, carboxamido, or alkoxycarbonyl; or a pharmaceutically acceptable salts thereof.

- 2 (Currently Amended). The A compound of Claim 1 wherein E is -CHR<sup>6</sup>C(O)R<sup>10</sup>, where R<sup>6</sup> is alkyl and R<sup>10</sup> is heteroaryl optionally substituted with one or two R<sup>d</sup> independently selected from alkyl, haloalkyl, alkoxy, alkoxyalkyl, cycloalkyl, hydroxy, haloalkoxy, halo, carboxy, alkoxycarbonyl, aryl, heteroaryl, amino, monosubstituted amino, disubstituted amino, or acyl and wherein the aromatic or alicyclic ring in R<sup>d</sup> is optionally substituted with one, two, or three substitutents independently selected from alkyl, haloalkyl, alkoxy, haloalkoxy, halo, hydroxy, carboxy, alkoxycarbonyl, amino, alkylamino, or dialkylamino.
- 3 (Currently Amended). The A compound of Claim 1 wherein E is -CR<sup>5a</sup>R<sup>6a</sup>CN, where wherein R<sup>5a</sup> and R<sup>6a</sup> together with the carbon atom to which they are attached form cycloalkylene optionally substituted with one or two R<sup>b</sup> independently selected from alkyl, halo, dialkylamino, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, alkoxycarbonyl, or aryloxycarbonyl.
- 4 (Currently Amended). The <u>A</u> compound of Claim 1 wherein E is –CR<sup>5a</sup>R<sup>6a</sup>CN<u>, where</u> wherein R<sup>5a</sup> and R<sup>6a</sup> together with the carbon atom to which they are attached form cyclopropyl.
- 5 (Currently Amended). The A compound of any one of the Claims 2-4 2 wherein R¹ and R² are hydrogen and Q is -CO-.

- 6 (Currently Amended). The A compound of any one of the Claims 2-5 2 wherein R<sup>1a</sup> is –(alkylene)-SiR<sup>32</sup>R<sup>33</sup>R<sup>34</sup>, where R<sup>32</sup> is alkyl, R<sup>33</sup> is alkyl, and R<sup>34</sup> is alkyl or aralkyl.
- 7 (Cancelled).
- 8 (Currently Amended). The A compound of any one of the Claims 2-7 2 wherein R³ is heterocycloalkyl, aryl, or heteroaryl optionally substituted with one or two Rf.
- 9 (Currently Amended). The A compound of any one of the Claims 2-7 2 wherein R³ is morpholin-4-yl, 1-ethylpiperazin-4-yl, or phenyl optionally substituted with one or two substitutents independently selected from halo, alkoxy, alkyl, haloalkoxy, phenyl, alkylsulfonyl, haloalkyl, heteroaryl, cyano, acyl, hydroxyalkyl, or alkoxycarbonyl.
- 10 (Currently Amended). A compound <u>according to Claim 1</u> selected from the group consisting of:
- morpholine-4-carboxylic acid  $\{1(R)-[1(S)-(benzoxazol-2-ylcarbonyl)-butylcarbamoyl]-2-trimethylsilanylethyl}amide;$
- morpholine-4-carboxylic acid  $\{1(R)-[1(S)-(benzoxazol-2-ylcarbonyl)-propylcarbamoyl]-2-trimethylsilanylethyl}amide;$
- morpholine-4-carboxylic acid  $\{1(R)-[1(R)-(benzoxazol-2-ylcarbonyl)-propylcarbamoyl]-2-trimethylsilanylethyl<math>\}$ amide;
- morpholine-4-carboxylic acid  $\{1(R)-[1(S)-(benzoxazol-2-ylcarbonyl)-pentylcarbamoyl]-2-trimethylsilanylethyl<math>\}$ amide;
- morpholine-4-carboxylic acid  $\{1(R)-[1(S)-(5-chlorobenzoxazol-2-ylcarbonyl)-propylcarbamoyl]-2-trimethylsilanylethyl<math>\}$ amide;
- morpholine-4-carboxylic acid  $\{1(S)-[1(S)-(benzoxazol-2-ylcarbonyl)-propylcarbamoyl]-2-trimethylsilanylethyl<math>\}$ amide;
- morpholine-4-carboxylic acid  $\{1(R)-[1(S)-(benzoxazol-2-ylcarbonyl)-butylcarbamoyl]-2-trimethylsilanylethyl}amide;$
- 1-(R)-morpholine-4-carboxylic acid [1-(1-cyanocyclopropylcarbamoyl)-2-(trimethylsilanyl)-ethyl]amide;
- 1-(R)-morpholine-4-carboxylic acid [1-(4-cyano-1-ethylpiperidin-4-ylcarbamoyl)-2-(trimethylsilanyl)ethyl]amide;
- 1-(R)-morpholine-4-carboxylic acid [1-(4-cyano-1,1-dioxohexahydro-1 $\lambda$ <sup>6</sup>-thiopyran-4-yl-carbamoyl)-2-(trimethylsilanyl)ethyl]amide;

- morpholine-4-carboxylic acid [1-(*RS*)-(1-benzyloxymethyl-1-cyanopropylcarbamoyl)-2-trimethyl-silanylethyl]-amide;
- morpholine-4-carboxylic acid [1-(RS)-(2-benzyloxy-1-cyano-1-methyl-ethylcarbamoyl)-2-trimethylsilanylethyl]amide;
- 4-ethylpiperazine-1-carboxylic acid [1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethyl-silanylethyl]amide;
- 3'-methoxybiphenyl-3-carboxylic acid [1-(R)-(1-cyano-cyclopropylcarbamoyl)-2-trimethylsilanylethyl]amide;
- N-[1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethylsilanylethyl]-3-iodobenzamide;
- 3'-trifluoromethoxybiphenyl-3-carboxylic acid [1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethylsilanylethyl]amide;
- biphenyl-3-carboxylic acid [1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethylsilanylethyl]-amide;
- 2',6'-dimethoxybiphenyl-3-carboxylic acid [1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethylsilanylethyl]amide;
- 4'-methylsulfonylbiphenyl-3-carboxylic acid [1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethylsilanylethyl]amide;
- 2'-chlorobiphenyl-3-carboxylic acid [1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethyl-silanylethyl]amide;
- 2'-trifluoromethylbiphenyl-3-carboxylic acid [1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethylsilanylethyl]amide;
- 3'-methylbiphenyl-3-carboxylic acid [1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethyl-silanylethyl]amide;
- 3'-trifluoromethoxybiphenyl-3-carboxylic acid [1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethylsilanylethyl]amide;
- N-[1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethylsilanylethyl]-3-pyridin-3-ylbenzamide;
- 3'-cyanobiphenyl-3-carboxylic acid [1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethyl-silanylethyl]amide;
- 3'-hydroxymethylbiphenyl-3-carboxylic acid [1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethyl-silanylethyl]amide;
- 4'-hydroxymethylbiphenyl-3-carboxylic acid [1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethyl-silanylethyl]amide;
- 2'-methylbiphenyl-3-carboxylic acid [1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethyl-silanylethyl]amide;

- 3'-methoxycarbonylbiphenyl-3-carboxylic acid [1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethylsilanylethyl]amide;
- 4'-acetylbiphenyl-3-carboxylic acid [1-(RS)-(1-cyanocyclopropylcarbamoyl)-2-trimethyl-silanylethyl]amide;
- 3'-methoxybiphenyl-3-carboxylic acid [1-(RS)-(4-cyano-4-tetrahydrothiopyran-4-ylcarbamoyl)-2-trimethylsilanylethyl]amide;
- 3'-methoxybiphenyl-3-carboxylic acid [1-(RS)-(4-cyano-1,1-dioxohexahydro-1 $\lambda$ <sup>6</sup>-thiopyran-4-yl-carbamoyl)-2-(trimethylsilanyl)ethyllamide; and
- 1-[3-(benzyldimethylsilanyl)-2*R*-(2,2,2-trifluoro-1-phenylethylamino)propionyl]cyclopropane-carbonitrile;
- or a pharmaceutically acceptable salt thereof.
- 11 (Currently Amended). A pharmaceutical composition comprising a compound of any of the Claims 1-10 Claim 1 and a pharmaceutically acceptable excipient.
- 12 (Cancelled).

[no claim 13 in the specification as originally filed]

- 14 (Currently Amended). The method of Claim <u>18</u> <del>13</del> wherein the cysteine protease is Cathepsin S.
- 15 (Currently Amended). The method of Claim 14 wherein the disease is an psorasis psoriasis, autoimmune disorder, allergic disorder, chronic obstructive pulmonary disease, or cardiovascular disease.
- 16-17 (Cancelled).
- 18 (New). A method for treating a disease in an animal mediated by cysteine proteases, which method comprises administering to the animal a therapeutically effective amount of a compound of Claim 1.
- 19 (New). A compound of Claim 3 wherein R<sup>1</sup> and R<sup>2</sup> are hydrogen and Q is -CO-.

- 20 (New). A compound of Claim 3 wherein  $R^{1a}$  is –(alkylene)-Si $R^{32}R^{33}R^{34}$  where  $R^{32}$  is alkyl, and  $R^{34}$  is alkyl or aralkyl.
- 21 (New). A compound of Claim 3 wherein R³ is heterocycloalkyl, aryl, or heteroaryl optionally substituted with one or two R⁵.
- 22 (New). A compound of Claim 3 wherein R³ is morpholin-4-yl, 1-ethylpiperazin-4-yl, or phenyl optionally substituted with one or two substituents independently selected from halo, alkoxy, alkyl, haloalkoxy, phenyl, alkylsulfonyl, haloalkyl, heteroaryl, cyano, acyl, hydroxyalkyl, or alkoxycarbonyl.
- 23 (New). A compound of Claim 4 wherein R<sup>1</sup> and R<sup>2</sup> are hydrogen and Q is -CO-.
- 24 (New). A compound of Claim 4 wherein R<sup>1a</sup> is –(alkylene)-SiR<sup>32</sup>R<sup>33</sup>R<sup>34</sup> where R<sup>32</sup> is alkyl, R<sup>33</sup> is alkyl, and R<sup>34</sup> is alkyl or aralkyl.
- 25 (New). A compound of Claim 4 wherein R³ is heterocycloalkyl, aryl, or heteroaryl optionally substituted with one or two R⁵.
- 26 (New). A compound of Claim 4 wherein R<sup>3</sup> is morpholin-4-yl, 1-ethylpiperazin-4-yl, or phenyl optionally substituted with one or two substituents independently selected from halo, alkoxy, alkyl, haloalkoxy, phenyl, alkylsulfonyl, haloalkyl, heteroaryl, cyano, acyl, hydroxyalkyl, or alkoxycarbonyl.